

CR-131260

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING
DRAWER EE
STATE COLLEGE, MISSISSIPPI 39762
PHONE (601) 325-3912

April 6, 1973

Gentlemen:

This letter constitutes the third Type I progress report as called for in Article II of the NASA Contract Document NAS5-21817.

- a) This report concerns ERTS-A proposal NASA Control Number 25-001-041 having the title: Study of the Application of Remote Sensing Data to Land Use Planning on the Mississippi Gulf Coast.
- b) The principal investigator is:
Frank Ingels, Ph.D.
Principal Investigator - UN689
Mississippi State University
Drawer EE
Mississippi State, MS 39762
- c) At this time there are no unusual problems impeding the investigation.
- d) During the reporting period (ending April 14, 1973) the project personnel has received a set of data concerning Hancock County, Mississippi. This data was obtained from NASA-MTF-ERL and is a set of data from an aircraft flight made on September 30, 1971, at an altitude of 60,000 feet.

This data has been prepared in much the same manner as the MSS data from ERTS will be prepared and it was felt that reviewing this data would give the project personnel an idea of the type of data product to be received from ERTS. This data is most likely more accurate and more detailed than the ERTS data product will be but it is meritable to compare the data products from ERTS and High Altitude Aircraft.

ERTS-1 data taken over the Gulf Coast area (having less than 30% cloud cover) is sent to the MSU research team. This data, on the 9.5+ positive transparency, is located on a Mississippi map. From this map, the percent of the three county Gulf Coast area covered by each frame can be determined. This information, along with cloud cover and quality of the data is noted on a data analysis sheet (enclosed). The data analysis sheet will be used to make statistical statements about the frequency and usability of the data for the final report.

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E73-10460) STUDY OF THE APPLICATION OF
 REMOTE SENSING DATA TO LAND USE PLANNING
 ON THE MISSISSIPPI GULF COAST Progress
 report (Mississippi State Univ.) 4 p HC
 CSCI 08B G3/13 00460
 3.00

Computer generated Land Use Maps have not yet been made by NASA-MTF, however, the test sites have been located and we expect maps made from the August 6 and 7 data to be available shortly. After receiving this map we anticipate checking the results against a 1971 Land Use Map made by the Gulf Coast Regional Planning Commission. We will also take this computer map to various possible users and obtain evaluations as to usefulness and possible format changes.

- e) No significant results have been obtained during this period.
- f) No papers or publications have been released during this period.
- g) No recommendations are offered at this time.
- h) There are no changes in standing order forms.
- i) There are no description forms for this period.
- j) All data for this project is obtained though the NASA-MTF-ERL facility. There are no request forms filed specifically for this project.
- k) There is no other information to report at this time.

Sincerely,



Frank Ingels, Ph.D.
Associate Professor

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Enclosure

GULF COAST DATA ANALYSIS SHEET

PICTURE		% TEST SITE		CLOUD COVER		COMMENTS	# OF SETS	70 MM
DATE	TIME	PICTURE	PASS	PICTURE	SITE			
1032	15555	40 %	40 %	30 %	10 %	Good over Gulfport - Biloxi area One set went to Frank Miller of Forestry dept.	2	✓
1050	15553	0 %	0 %	5 %	not covered	About half the scan lines are missing on camera 6	2	✓
1051	16012 16014	0 % 90 %	90 %	1 % 20 %	50 %	About 1/4 the camera 6 scan lines are missing. Clouds make this pass of very little use to us.	2 2	✓ ✓
1052	16070	0 %	0 %	0 %	not covered	About 1/3 of camera 6 scan lines are missing.	2	✓
1070	16070 16073	0 % 0 %	0 %	0 % 0 %	not covered		2 2	✓ ✓
1106	16074	0 %	0 %	2 %	not covered		2	✓

PICTURE		% TEST SITE		CLOUD COVER		COMMENTS	# OF SETS	70 MM
DATE	TIME	PICTURE	PASS	PICTURE	SITE			
1158	15561 15564	0 % 46 %	46 %	0 % 0 %	0 %	Good images - extend west almost to Gulfport	2 2	
28 Dec 72								
1177	16020 16023	0 % 96 %	96 %	0 % 0 %	0 %	Excellent pass * we were not shipped camera 6 images for 1177-16023	2 2*	✓ ✓
16 Jan 73								
1194	15562 15564	0 % 54 %	54 %	20 % 5 %	0 %	15562 covered by scattered clouds 15564 good over test site	2 2	✓ ✓
2 Feb 73								
1195	16020 16023	0 % 91 %	91 %	0 % 0 %	0 %	A very good pass	2 2	✓ ✓
3 Feb 73								
1196	16075	0 %	0 %	10 %	not covered		2	✓
4 Feb 73								